Values, Memory, and the Role of Exploratory Methods for Policy-Design Processes and the Sustainable Redevelopment of Waterfront Contexts: The Case of Officine Piaggio (Italy)

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Values, Memory, and the Role of Exploratory Methods for Policy-Design Processes and the Sustainable Redevelopment of Waterfront Contexts: The Case of Officine Piaggio (Italy)

Cristina Coscia, Giulia Lazzari and Irene Rubino *

Department of Architecture and Design, Politecnico di Torino, 10125 Torino, Italy; cristina.coscia@polito.it (C.C.); giulia.lazzari@studenti.polito.it (G.L.)

* Correspondence: irene.rubino@polito.it; Tel.: +39-011-090-6407

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Abstract: In the last few decades the renewal of waterfront contexts has been especially inspired by neoliberal approaches favoring the creation of residential units and entertainment facilities. However, sustainability frameworks suggest that the economic dimension should be interpreted in a way that goes beyond the profitability of the interventions and that takes into account non-monetary values as well. In light of the complex social value (CSV) theory—which considers as a fundamental value component the intrinsic values attributed by communities to environmental and cultural heritage resources—this article proposes the adoption of exploratory methods to firstly map and then integrate citizens' points of view into the evaluation and design of redevelopment scenarios, selecting the ex-industrial complex of Officine Piaggio (Italy) as a case study. Survey results highlighted that discrepancies between the new functions advanced by official redevelopment proposals and citizens' opinions were present, and that values such as memory and collective meaning need to be considered if multidimensional sustainability represents a goal. Coherent with these results, a new project scenario is then envisioned and implications related to the application of exploratory methods in the decision-making and policy-design processes are finally advanced.

Keywords: sustainable redevelopment; waterfront; decision-making; complex social value; values; memory; industrial heritage; cultural heritage; preservation; Officine Piaggio

1. Introduction

The redevelopment of waterfront contexts is a multifaceted issue that has received great attention in the last decades, and some of the dimensions that definitely need to be taken into account during the decision-making and policy-design processes concern the environmental, economic, cultural and social sustainability of the hypothesized interventions [1–6]. However, generally speaking, the public decision-making process has sometimes been subordinated to the pressure received from big companies, a strong focus on financial gains and the conducting of inefficient appraisal procedures [7]. In light of the complex social value theory [8–10], the preferences expressed by different stakeholders and the non-monetary values assigned both to the status quo (current values) and to project options (foreseen values) should be included in the evaluation of redevelopment scenarios [11–14], instead. This is of particular importance especially when cultural heritage resources are involved: in fact, as underlined by the literature [15], cultural heritage can contribute to the well-being of communities, mitigate the impacts of cultural globalization and also become an incentive for sustainable economic development. Moreover, the process of re-use of abandoned or inefficiently used historic buildings is central for revitalizing communities and improving their quality of life.

In line with this framework, in this paper we adopt exploratory methods capturing residents' and non-residents' points of view as a way to investigate the non-monetary values of waterfront contexts, to explore their intrinsic values [16] and to critically evaluate potential and actual courses of action. We apply this approach to the case of Officine Piaggio, i.e., an abandoned ex-industrial waterfront complex located in Finale Ligure (Italy). This case study seems of particular relevance, since the redevelopment of Officine Piaggio is currently the object of a lively debate between private owners, the local public administration (i.e., the Region and the Municipality), *Fondo Ambiente Italiano* (i.e., a no-profit devoted to the safeguard of environmental and cultural heritage assets located in Italy), inhabitants and tourists. The argument concerns the actions to be pursued in relation to the protection, transformation or even demolition of this compound, and it may be advanced that a structured investigation of its multiple value components could better inform the decision-making process and overcome top-down approaches favoring short-term economic goals and excluding potential historical, symbolical, cultural and aesthetic values.

In dealing with this case study, we have tried to follow a sustainable development framework throughout the whole research process, from the definition of the research questions, to the choice of the research methods adopted, to the outline of a competitive framework incorporating sustainability elements, to the performance of the SWOT analysis and the final proposal of a sustainable redevelopment scenario. Overall, we examine the role of historical knowledge, memory and symbolic meaning in shaping preferences towards different regeneration hypotheses and we propose the inclusion of results in traditional SWOT analyses. In Section 2 we provide an overview of the debate concerning the sustainable redevelopment of waterfront contexts and of the approaches that can be followed to foster the multidimensional sustainability of the interventions, together with their components of risk and uncertainty [17–20]; in Section 3 we describe the peculiarities of the case study under investigation, underlying its significance and elements of originality; in Section 4 we outline the research design, with particular attention to the process followed and to the stakeholders involved; in Section 5 we present and discuss the main results, highlighting that memory and attachment to the ex-industrial complex are still present among survey participants, and that consequently redevelopment scenarios should capitalize on the industrial heritage providing uniqueness and meaning to the place; finally, in Section 6, we draw conclusions and suggestions on future steps for research.

2. The Sustainable Redevelopment of Waterfront Contexts: Literature Background

2.1. Sustainability Issues

Following a physical perspective, waterfront is defined as a unique spatial interface created by the encounter of water (i.e., ocean, sea, lake, river) with urbanized land [21]. As a consequence of the industrial decline that has affected many cities and towns in the last century, since 1970s waterfronts such as ports, docks, power stations and industrial complexes have started to be the focal points of regeneration and re-use projects, and in some cases they have even assumed a central role in the urban renewal of cities, as the examples of Sydney, Hong Kong, London and Toronto—among the others—clearly show [21]. Even if the scale of the interventions may undoubtedly affect their complexity and economic relevance, it is now common knowledge that waterfront redevelopment projects need to take into account environmental, economic, cultural and social sustainability issues [1–3,5,22]. In fact, it is recognized that planned interventions should not only secure the quality of water and the environment, but they should also allow a mixed use of the space, both functionally and socially; moreover, local community and stakeholders should be involved in the decision-making process from the very beginning and the preservation of the industrial past should be considered an asset giving character and meaning to the new context. For instance, the historical and architectural values of the buildings and of the context as a whole should be considered as a resource providing uniqueness and inspiring sustainable transformation scenarios. Additionally,

revitalization should be conceived both as an ongoing process and as a long term objective, to be achieved independently from short-term interests, included the economic ones [23].

As suggested by some scholars, the discourse about economic value has been shaped in recent times mainly by an approach inspired by neoliberal urbanism [24,25], in which the concepts and praxes of market rationality, competitiveness and entrepreneurialism dominate [25]. In practical terms, this approach has been translated in many cases into the building of expensive apartments and into the creation of commodified places of leisure and entertainment [25,26], pursuing what has been defined as a "*post-industrial, post-Fordist residential, work and leisure lifestyle*" [27] (p. 114). With particular regard to the real estate sector, potential returns on investment can be 40–60% higher for waterside residential units [21], and it is known that projects involving the waterfront generally foster increased land and property values [28].

However, redevelopment projects can nevertheless generate benefits affecting a wider part of society, e.g., through the creation of jobs and the enhancement of the aesthetic quality of lands previously subject to degradation and even abandonment [25,29]. Depending on the objectives and stakeholders involved, interventions can thus have different sociocultural values, and even if the neoliberal approach has been predominant, examples of waterfronts converted for instance into places for social housing or having socially-oriented functions exist [30]. Additionally, some contributors have underlined that waterfronts should be conceived as inherently public assets, and that consequently multi-use functions that fit with the community's shared goals should be envisioned [31], as it happens for other urban and peri-urban milieus [32]. In this context, the historic and cultural sustainability of the interventions [33], together with the power of redevelopment for the conservation (or the alteration) of local identities need to be taken into account as well, especially when the buildings and the context at large present characteristics of architectural exceptionality [34], they have historic significance and are perceived as part of the identity of the place [28,35]. However, if on the one hand projects that preserve the uniqueness and sense of place should be encouraged, on the other one this line cannot be taken for granted: for instance, in the case of the regeneration of the Golden Horn (Instanbul, Turkey), the project has threatened listed buildings and monuments and it has also implied the demolition of historical industrial facilities [28]; the same can be said for the case of the Queensborough neighborhood of New Westminster (British Columbia), where industrial buildings providing historical distinctiveness to a waterfront area have been demolished to enable the construction of more modern and homogeneous apartments [36].

Within this framework, the non-monetary component of value (e.g., legacy and bequest value) assumes strategic importance in the decision-making process [37], particularly for the components of existence, identity and memory for future generations [38–41]. Given that sustainable adaptation assists in preserving the cultural identity of the waterfront, it is thus important to engage the community and all interested parties in the decision-making process relating to heritage conservation. As explained in the following section, the value theory for cultural heritage and environmental assets incorporates the consolidated literature, but taking into account the recent research on the creation of value linked to landscape and ecosystem services [42–45] seems absolutely central.

2.2. The Complex Social Value Theory and the Intrinsic Value Component

The Complex Social Value (CSV) theory recognizes that the value of a landscape, environmental or cultural heritage resource is the result of the combination of its economic values and its intrinsic/cultural values (e.g., historical, symbolical, social, aesthetical), which can be deduced from the role that the resource plays in a certain cultural, institutional or social context [46,47]. As affirmed by the literature [48], economic values can be subdivided into use-values (i.e., the benefits that are enjoyed by the subjects that directly experience the cultural good) and non-use values (i.e., the value that is attributed to a cultural good by a subject, even if he/she has not directly experienced that good yet or she/he will never experience it). However, as underlined by Throsby, it is likely that some elements of the cultural value of the asset cannot reasonably be expressed in financial terms, even though they

are important for decision-making [49]. In fact, "*heritage decision making is constantly faced with the long-term implications of strategies for conservation, upgrading, and adaptive reuse of buildings and sites*" [49] (p. 49), and both the precautionary principle—which supports a risk-averse line when irreversible consequences are possible- and intergenerational equity issues need to be taken into account if a sustainable development approach is desired [49]. In a sustainability framework, the CSV seems a particularly suitable approach since it expresses the different value components coherently with the nature (e.g., quantitative and/or qualitative) of the components themselves [50,51]: this means that, for instance, intrinsic values should not necessarily be expressed through monetary terms but through weights and indexes, instead. These peculiarities distinguish the CSV theory from the Total Economic Value (TEV) approach, i.e., a well-established framework that aims to translate into monetary terms both use and non-use values, instead [10].

Essential steps in CSV-inspired evaluations are represented by the mapping of the stakeholders, by the identification of the intrinsic values attributed by them to the resources under study, and by the investigation of the utility and meaning that different users attach to hypothesized interventions [46,52]. According to recent examples of "new architectural assets" and to Forte and Fusco Girard [52], the notion of the 'complex social value' proposes a particular experience for the fruition of the historical/cultural heritage: in the evaluation of the beauty of new urban design projects, the fruition becomes what integrates the 'use value' with the research of immaterial components (symbols, meanings, originality, etc.). As Forte and Fusco Girard say, "The evaluation of the complex value of beauty that characterizes some new architectural assets, integrating tangible and intangible aspects, helps in revitalization of urban spaces projects, promoting also creative capacity" [52] (p. 160). This means that—as in the present case study—the intrinsic values are not only the historical, symbolic and aesthetic ones, but they also include the preservation of the characteristics of the cultural good and of the context, together with their perception at the time of use. They incorporate memory and beauty education, with the aim of increasing among stakeholders the awareness about the stratification of these values, which—coherently with a sustainable dimension—contribute to the quality of life of those who benefit from these territories, both inhabitants and tourists.

Overall, not only the points of view of experts, decision-makers and economic stakeholders should be considered in redevelopment projects, but also the opinions of citizens, "insiders" and "outsiders". According to Cerreta et al. [16], the perception of the site and of the regeneration process is generally different for "insiders" and "outsiders": for instance, developers and policy-makers may be outsiders, but an outsider can also be a person who does not belong to the local community, the same socioeconomic group or does not have the same education and training. In other words, insiders and outsiders perceive a given context through the filter of their social and cultural background. Even if "the issue of community participation raises many questions about the extent and validity of the knowledge and opinion of local communities" [5] (p. 124), it can be stated that the engagement of residents and locals should be systematic. Also, it can be implemented at different stages of the project: at the beginning, to map communities' values and needs and thus better inform the decision-making and policy-design processes [53], but also in a following stage, to better validate waterfront development solutions [31] and make choices acceptable for the community [11]. If totally bottom-up approaches are sometimes neither possible nor recommendable, the inclusion of citizens and stakeholders' points of view from the very beginning has the benefit to open a debate, arise public awareness, highlight conflicting positions and thus stimulate decision-makers to find mediating solutions or at least to justify their intended course of action. However, it must be noted that in some cases public presentation programs of waterfront redevelopment projects have been conceived only as a place-marketing strategy and as a means of persuasion [27], and overall democratic participation has often been marginalized in favor of economic and financial considerations [27].

As underlined in the previous paragraphs, the sustainable redevelopment of waterfront contexts is a multidimensional issue, and its multifaceted values cannot be expressed only in monetary terms.

For this reason, the theoretical background of the CSV is increasingly closely linked to the strategic assessment tools to support decision-making, detailed in the following paragraph.

2.3. Theoretical and Methodological Approaches for Decision-Making

In general, the techniques more frequently adopted to map citizens' preferences and values are usually focus groups, open forums [27], interviews and surveys [5]. Then, citizens' and other stakeholders' opinions can be integrated together with the ones expressed by experts, sometimes following analytic hierarchy processes [11] or multiple criteria decision analyses approaches that entail the weighting and the aggregation of the values assigned to the different attributes of the decision problem [51]. A common topic that is usually examined is, for instance, the identification of the priorities and new functions to be assigned to the redevelopment scenarios [54]. Citizens' points of view about different project options are then frequently investigated through visual preferences assessment techniques [55–57], where images are used as triggers to stimulate participants to express their preferences, ratings and thoughts about different possible solutions. This approach can be a useful contribution of passive participation towards the implementation of urban policies.

If appropriate, qualitative and soft values can then be converted in monetary values through the willingness to pay (WTP) approach, which is deemed particularly effective in communicating the values attributed to the changes brought by a project [58]. About this point it must be underlined that the WTP approach has been used as a method aiming at satisfying different research and policy-making needs. For instance, some authors have used the WTP approach to calculate the TEV brought by restoration/regeneration projects (i.e., selecting a representative sample of respondents and then extending the WTP amounts to the whole community identified as benefiting from the project itself) [59], especially when conducting cost-benefit analyses aiming at evaluating the opportunity of implementing a specific project and its financial sustainability [59,60]. However, the limits of this kind of application have been widely underlined by the literature, and one of the major weaknesses—apart from the hypothetical nature of the scenario proposed, the free-rider issue and the ways in which the problem statements are formulated [59]—is the difficulty in determining the beneficiaries of the project and/or the subjects that may be affected and interested by the hypothesized changes, but also in choosing whether values should be aggregated over individuals or households [61].

Others consider WTP as a method to predict future demand curves and estimate possible private monetary contributions helping the financial sustainability of a project [62], instead. Then, recent studies have mainly considered it as a tool useful to translate in objective terms—through the means of monetary amounts—subjective judgments and to identify possible correlations between expressed WTP amounts and characteristics of respondents (e.g., socio-demographics but also knowledge and direct experience of the sites under investigation) [61,63,64]. In this last case the aim is to identify possible WTP trends and sometimes to orient the policy-design and decision-making process (e.g., selecting which interventions should be prioritized, establishing appropriate fundraising strategies, but also gaining a greater awareness about the relationships possibly occurring between specific characteristics of individuals and the attitudes towards a given site). As highlighted in Section 4, in this study we will embrace the WTP approach in this last connotation.

3. The Case of Officine Piaggio (Italy)

3.1. Aims of the Study and Research Questions

Coherently with the framework described above, in this paper we propose the adoption of exploratory approaches aiming at capturing citizens' values and preferences as a way to orient project solutions, to be integrated with well-established techniques such as SWOT analyses and to be compared with the guidelines suggested by experts in the fields of architecture, urban planning and conservation. More particularly, we propose the empirical application of exploratory approaches to the case of Officine Piaggio (Finale Ligure, Italy), a private ex-industrial waterfront complex that is currently

abandoned and for which some redevelopment alternatives—not entailing the extensive conservation of the buildings—have officially been proposed under the form of the Urban Operational Plan (U.O.P.).

Through the conduction of a survey that involved a total of 216 residents and non-residents, we aimed at answering to the following questions:

(a) *Which are the values associated by survey participants to Officine Piaggio? Are participants in favor of the demolition or the conservation of the complex?* The aim is to highlight the perception of citizens on the value components; in fact, the outcomes generated by the conservation of memory, by the restoration and protection of the architectural buildings and the context are not yet sufficiently investigated in the literature;

(b) *How do participants value the project hypotheses proposed by the U.O.P.? Are participants' judgments related to the values they associate to the complex and/or to some personal characteristics?* The goal is to investigate participants' opinions about project hypothesis and verify if these hypotheses meet participants' needs, values and preferences;

(c) *What are the new uses envisioned by survey participants for the Officine Piaggio area? Do they reflect the ones proposed by the U.O.P.?* These questions aim at comparing current public policies with participants' opinions, to determine if they are consistent or if some discrepancies exist.

3.2. Officine Piaggio: History, Territorial Context and Competitive Framework

The Officine Piaggio complex is located along the coast of Finale Ligure, i.e., an 11,000-inhabitants town that belongs to the Savona province. The local economy relies on industrial and craft activities, but especially on summer seaside tourism. In fact, the town has become an appreciated tourist destination since the 1950s, and it has progressively experienced a significant expansion of holiday houses.

The Officine Piaggio complex, which extends over an area of 52,400 m^2, is today in a state of severe degradation, but during the 20th century it strongly influenced the economic growth of the community and village of Finale Ligure (Figure 1). Generally speaking, the Ligurian Riviera waterfront shows many examples of industries built along the coast due to the geomorphology of the region and the proximity to the main communication arteries: the railway line and the Aurelia road [65].

The history of Officine Piaggio starts in 1900, when Rinaldo Piaggio (1864–1938) decided to open a new branch of his business in Finale Ligure for the wood processing industry [66]; then, in 1907 the first warehouses, designed by the architect Riccardo Haupt, were built close to the railway line. The task of expanding the industrial plant to host the production of airplanes and seaplanes is then entrusted to the young Piedmontese architect Giuseppe Momo (1875–1940), as confirmed by the drawings kept in the Turin State Archives, who built the large experimental hangar in reinforced concrete between 1917 and 1920. The hangar system is of exceptional value since it is unusual and innovative for an industrial building [67]: it is made up of a single central nave (22 m height $\times$ 26 m width $\times$ 100 m length), flanked by five sheds on the sides. Between 1917 and 1920 Momo also designed the sheds for the Officine Motori and in 1937 the Palazzina Uffici, using a rationalist style with stereometric volumes and ribbon windows [68]. Up to 2000, the Piaggio factory district has grown in specialization and has played a key role in the aeronautics industry. The factory has been abandoned since 2013, when it was decided to move the production to Villanova d'Albenga, and Piaggio decided to sell the property of Officine to the Finalmare S.p.a. company. In 2007, an Urban Operational Plan (U.O.P.) proposing the demolition of the complex—with the exception of 200 square meters of the hangar—in favor of the creation of a new residential and touristic district was advanced. In 2013 a U.O.P. variant allocating some space to public functions but still prioritizing touristic and real-estate purposes was then proposed. At present there is not a regional, provincial or municipal plan that prescribes the protection of the area and the conservation of the buildings, with the exception of the prohibition of demolition expressed in 2016 by the local Soprintendenza, i.e., the local branch of the Italian Ministry of Cultural Activities and Heritage. Soprintendenza justified this position with the following statement: "*With demolition the inseparable relationship between the natural landscape and the built-up area of the city of Finale would be lost immediately*" (declaration of cultural interest, 2016). Additionally, local associations are asking for the

conservation of these architectures. In particular, Salvaguardia del Finalese association and the national foundation *Fondo Ambiente Italiano* (FAI) have organized events and conferences to promote a revision of the proposals advanced in the U.O.P., which seem to be unsustainable from the environmental and the sociocultural points of view. In this context the survey was born as a tool to investigate the relationship between the industrial complex and the population and it aims to deepen the motivations in favor of the conservation or demolition of these structures.

Figure 1. The Officine Piaggio complex in the municipality of Finale Ligure: location and consistencies. (Source: authors' elaboration.)

4. Materials and Methods

The research process was carried out following four phases (Scheme 1):

RESEARCH PROCESS	
1 THE BRIEF	1.1 ANALYSIS OF THE COMPETITIVE FRAMEWORK
	1.2 MAPPING OF THE STAKEHOLDERS
2 THE DESIGN OF THE SURVEY PROCESS	2.1 THE SURVEY PROCESS
	2.2 DATA MINING
	2.3 DATA ANALYSIS
3 THE SURVEY RESULTS	INTEGRATION INTO SWOT ANALYSES
4 THE SCENARIOS	4.1 GUIDELINES
	4.2 SCENARIO HYPOTHESIS

Scheme 1. This scheme shows the research process and the methods used during its four phases (Source: authors' elaboration.)

Phase 1 (the brief) focused on the analysis of the competitive framework and on the mapping of the stakeholders. More particularly, in Phase 1.1 the first step of the brief was represented by the design and analysis of the competitive framework, with the gathering of information regarding the historical–architectural characteristics of the buildings (see Section 3.2), the protection and planning issues, the valorization plans for the territory and social, cultural and tourism indicators. Scheme 2 summarizes the final data warehouse, divided into three macro-themes, represented in turn by a set of indicators (right column of Scheme 2): (1) social, economic and cultural structure; (2) conservation and planning; (3) landscape, waterfront. This structuring of data and indicators was instrumental to the application of the SWOT of phase 3, performed after the survey. Data were gathered concerning three different territorial scales: the regional one (Liguria Region); the provincial one (province of Savona, which covers an area of 1545 km^2 and includes 68 municipalities); and the municipal one (municipality of Finale Ligure).

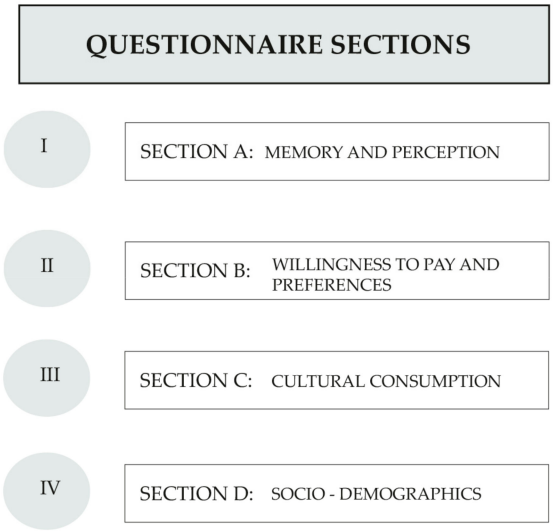
In Phase 1.2 we developed a conceptual map taking into account all the interested parties, useful both in the research phase and in a subsequent phase of the design process to understand the relational dynamics that exist between the actors involved [69–72]. We divided the stakeholders into two categories according to their characteristics, making reference to the best-known models in the stakeholder mapping literature—e.g., CIA, Gephi and Mendelow methods, approaches used by UNESCO—[73,74]: active stakeholder or insiders, such as the private owner of the area, the public (represented by the municipality of Finale Ligure and the Soprintendenza) and the associations involved; passive stakeholders or outsiders such as tourists and residents. The target identified for the questionnaires takes into account all the passive stakeholders, as possible users directly involved in the impact of the ex-industrial area redevelopment project.

Phase 2 (the design of the survey process) included the outline of the research questions and of the questionnaire, followed by the administration of the questionnaire, the data mining step (structure of the metadata, categorization, data entry, harmonization and standardization of data) and statistical elaboration. The questionnaire starts with an introductory paragraph that includes a brief presentation of the research aims and the instructions for completing it.

COMPETITIVE FRAMEWORK	
SOCIAL, ECONOMIC AND CULTURAL STRUCTURE	**SOCIAL INDICATORS** Comparison between regional, provincial and municipal demographic indicators: - the province of Savona is the most populous of the provinces of the Liguria region (281.028 people) - Finale Ligure is the fifth municipality in the province of Savona by population density (11.724 people) - The division into age groups shows a greater frequency between 40 and 54 years (59.2%)
	CULTURAL INDICATORS - the monthly average for cultural and recreational purposes of the Liguria region is lower than the Italian average: 3, 9% against 4, 1 %. - in the province of Savona there are no attractive museum structures as there are in the provinces of Genoa and La Spezia.
	INDICATORS ON TOURISM - 431,700 beds per holiday are estimated in the province of Savona, 38.8% of the region. - the regional monthly tourist trend shows a noticeable drop in attendance during the months of November and January, in particular for foreign tourists. - the largest inflows come from the neighboring regions: Lombardy and Piedmont cover almost 60% of arrivals and about 70% of presences.
CONSERVATION AND PLANNIG	**PLANNING AND POLICY DESIGN** - 1985, Legge Galasso: establishment of first Plan for protecting Landscape. - 2004, Code of Cultural Heritage and Landscape - Regional, provincial and municipal plans
	CONSERVATION CHARTERS - 1994, Nara charter: judgment of authenticity - 2000, Cracovia: memory - 2005, Faro: cultural heritage
	VALORISATION Guidelines for Ligurian riviera: - coastal park of western Liguria - valorisation of the Aurelia coastal road route - restoration of traditional buildings - establish a link with the hinterland for new touristic routes
LANDSCAPE, WATERFRONT	**ENVIRONMENTAL PROTECTION** - 1982 General Mercantile Plan for the defense of the sea and the coasts - Territorial Plan of the Coast of the Liguria region
	SOCIAL SUSTAINABILITY - the Complex Social Values (CSV) - importance of the social impact in the projects that involved complex, areas of connection between urban and natural landscape.
	HISTORICAL OVERVIEW - Evolution of the Ligurian coastal landscape following the advent of the industry - Mass tourism and its consequences for the Ligurian Riviera - The birth of the former Officine Piaggio factory and its growth related to the municipality of Finale Ligure.

Scheme 2. Competitive framework structure: macro area subject and their specific factor of interest. (Source: authors' elaboration.)

The questionnaire is divided into four sections, which cover four different fields of investigation (Scheme 3):



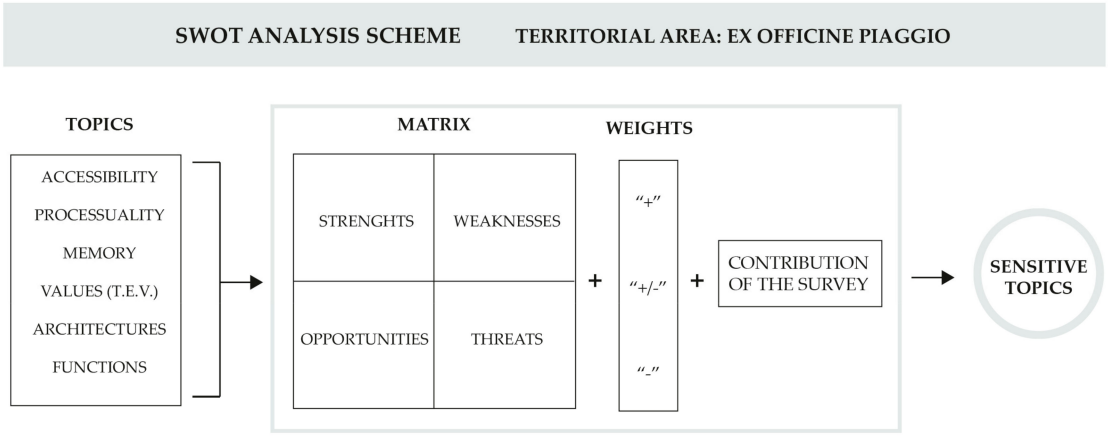
Scheme 3. Format questionnaire used for the survey. (Source: authors' elaboration.)

In Section A the knowledge of the ex-industrial site and the events related to it (such as the choices made by the local administration and by the Soprintendenza, the perception of the site and its memory) are investigated. In Section B a specific question asks participants to rank possible new uses. Then, it is asked about the Willingness to Pay (WTP) for a project to redevelop the area, i.e., how much participants would be willing to pay—in the form of a donation—to finance activities they think are proper for the area and the community. More specifically, coherently with a sustainable development approach, the benefits possibly stemming from the implementation of a regeneration project regard the enhancement of the buildings under study and of their environmental context, the preservation of the historical and symbolical values related to the architectures and the implementation of a mix of functions that may satisfy the cultural, recreational and economic needs emerged from the analysis of the competitive framework and waiting to be directly evaluated by passive stakeholders. In our case the goal of the WTP-related question is to highlight possible trends and correlations between WTP amounts and participants' characteristics, as well as to translate into quantitative terms if and how much the subject is really interested in the conservation and regeneration of the architectural complex; it does not serve as the basis of an economic estimation of the total economic value of the project.

In Section B questions asking participants both to visually evaluate the hypothetical projects proposed by the U.O.P and to justify their judgments are also included. In Section C respondents' cultural consumption patterns (e.g., attendance of cultural events or belonging to associations) are mapped, whereas Section D traces demographics and includes questions useful to distinguish residents from non-residents.

Due to the delicate situation of the area (i.e., privately owned but subject to public interest), some difficulties occurred during data collection, and questionnaires were administered in person by researchers at different times over a period of one year (from April 2017 to April 2018). Participants were randomly selected by researchers in different areas of Finale Ligure (e.g., local library, beach, main streets of the city center) to increase the probability of approaching different passive stakeholders. The data obtained from 216 questionnaires were then analyzed (Phase 2.2) to describe and summarize the salient aspects of the research. More particularly, data were analyzed by the means of descriptive statistics and chi-square tests of independence. Subsequently (Phase 2.3), results were interpreted thanks to the information obtained in the previous steps (Phase 1.1 and 1.2) and in light of statistical analyses.

In Phase 3 results were integrated into the SWOT analysis scheme to carry out strategic evaluations. In particular we included the themes of "memory" and "values," widely investigated by the questionnaires, in the canonic structure of SWOT analysis. The issues under evaluation concern the topics of accessibility, process, memory and values. The themes are then evaluated through the application of a symbol: "+" if they present positive characteristics; "+/−" if they have both positive and negative characteristics; "−" if they have negative characteristics. The evaluations are then compared with the outputs obtained from the survey to arrive at the definition of sensitive topics (Scheme 4).



Scheme 4. SWOT analysis referred to the territorial area of ex Officine Piaggio. (Source: authors' elaboration.)

In Phase 4 a project scenario was elaborated, both following the guidelines recommended by the literature and taking into account survey participants' values, preferences and needs. In Phase 4 additional guidelines stemming from the research process are also outlined. More particularly, eight macro-categories related to sensitive issues have been identified (landscape, conservation, waterfront, enhancement, user basin, connection, flows) within which the main principles are specified. These are interconnected categories that try to clarify the complexity of the theme and the area with the primary objective to maintain the readability of the place and of what it represents.

5. Results and Discussion

5.1. Survey Results

During the survey campaigns a total of 216 questionnaires were collected. As anticipated in Section 4, participants were randomly selected by researchers in different areas of Finale Ligure to increase the probability of approaching different passive stakeholders. In order to capture the points of view of both people having a permanent interest in the area and occasional users (e.g., tourists), we introduced a dichotomous variable related to residency, as follows:

$$V_1 = \begin{cases} 0 = \text{non} - \text{resident} \\ 1 = \text{resident} \end{cases}$$

For the purpose of this study we define residents in a broad way, i.e., as people permanently living either in Finale Ligure or in towns that can be reached with a commuting time of maximum 30 min and that are not further than 25 km from Finale. The sample was composed of both males (52.3%) and females (47.7%), with a mean age of 46 years (Min.: 15; Max.: 77; SD: 16.7). Education levels stated by participants included high-school (44.4%), university (34.3%) and middle-school (16.7%; n.a.: 4.6%). In light of the definition adopted, residents represented 51.9% of the people involved, whereas non-residents were 42.6%; 5.5% preferred not to declare their place of residence, so their answers were

taken into account only for cumulative results. Table 1 summarizes socio-demographics, whereas Table 2 presents the variables taken into account in the study.

Table 1. Descriptive statistics of respondents' socio-demographic characteristics.

Variable Name	Category	%
Gender	Female	47.7
	Male	52.3
Age (years)	16–25	16.7
	26–35	12.5
	36–45	17.1
	46–65	37.0
	66–84	16.7
Education level	Middle school	16.7
	High school	44.4
	University	34.3
	n.a.	4.6

Table 2. List of variables, coding scheme and percentages.

Variable Name	Description	Category	Code	%
V_1	Residency	Non-resident	0	42.6
		Resident	1	51.9
		n.a.	2	5.5
V_2	Awareness about events that led to the closing of the factory	No	0	34.7
		Yes	1	58.8
		n.a.	2	6.5
V_3	Agreement with Soprintendenza	No	0	26.9
		Yes	1	62.5
		n.a.	2	10.6
V_4	Meaning attributed to the Officine Piaggio complex	Abandoned	1	19.0
		Historical	2	31.0
		Symbolical	3	29.6
		Invasive	4	4.2
		Other	5	5.6
		n.a.	6	10.6
V_5	Active participation to initiatives aiming at preserving the buildings	No	0	87.0
		Yes	1	5.6
		n.a.	2	7.4
V_6	Need of a redevelopment project	No	0	12.0
		Yes	1	80.1
		n.a.	2	7.9
V_7	Knowledge of redevelopment projects	No	0	51.4
		Yes	1	37.5
		n.a.	2	11.1
V_8	Judgment about projects	Low	1	24.5
		Medium	2	14.4
		High	3	3.7
		n.a.	4	57.4
V_9	Willingness to pay (euros)	2–5	1	12.0
		5–10	2	15.7
		10–20	3	19.0
		20–50	4	19.0
		50–100	5	8.3
		>100	6	5.6
		n.a.	7	20.4

(a) Values associated by survey participants with Officine Piaggio and relations among variables

Overall, participants mainly perceived Officine Piaggio as a complex of historical buildings (31.0%) or symbolic buildings (29.6%); 19.0% recognized them as "abandoned buildings", whereas only 4.2% perceived them as "invasive"; 5.6% defined them in mixed ways and 10.6% did not know how to describe them. The majority of the participants (58.8%) stated that they followed the events that led to the closure of the factory and 48.1% affirmed they know someone who either used to work in the factory or works in the new one at present, thus suggesting that, to some extent, Piaggio is still linked to the local economy and to participants' interests and memory. To test the statistical dependence between V_1 and V_2, we performed a chi-square test, with $\alpha = 0.001$. Not surprisingly, the results highlighted that these two variables are not independent (χ^2 (1) = 10.102; $p = 0.001$), with residents being more likely to have followed the events. Interestingly, 62.5% agreed with the point of view manifested by the local Soprintendenza (i.e., not to demolish the complex); whereas agreement (V_3) is independent of variable V_1, a significant association (χ^2 (4) = 38.879; $p < 0.001$) was found between agreement (V_3) and V_4, i.e., the different meanings (e.g., symbolic, historical) attributed to the complex (Table 3).

Table 3. Chi-square tests between variables.

Variables	χ^2 Value	df	*p*-Value
$V_1 * V_2$	10.102	1	0.001
$V_1 * V_3$	0.059	1	0.809
$V_3 * V_4$	38.879	4	<0.001
$V_1 * V_7$	19.606	1	<0.001
$V_8 * V_4$	3.058	2	0.217
$V_1 * V_8$	0.541	2	0.763

Some participants (n = 96) agrred to better justify their response, providing open answers; for instance, the following ones exemplify the values attributed to the complex by participants and clarify why they supported the opinion of the local Soprintendenza: "*They are a piece of heart of Finale's inhabitants*" (female, aged 18); "*It represents a social and historical piece of memory*" (female, aged 55); "*I think that industrial areas have a collective memory value: they should be preserved and maybe converted to new uses*" (female, 68 years old); "*I think they're industrial heritage and they should be treated with respect*" (male, 71 years old); "*The architecture of the hangar is unique*" (male, 31 years old). The following quotes provide evidence of the reasons why some participants were not in agreement with Soprintendenza, instead: "*I don't think that the buildings are of particular architectural value*" (male, aged 63); "*They should be demolished and replaced. Something new and useful should be built*" (male, aged 23); "*It's an abandoned area and I think it has no value anymore*" (female, 20 years old). Content analysis applied to the texts written by participants allowed to identify four main categories of responses: the buildings have a memory and socio-historical value (45.8%); the buildings are interesting by an architectural perspective (21.9%); the area is abandoned and in the current state it has lost its value (24.0%); the buildings are not interesting by an architectural perspective (8.3%). More particularly, the concept of "memory" is connected in participants' responses to the history of the town, to its industrial past, to the people who worked there, to the social function of the factory, to the role played by Officine Piaggio for the economic development of the area and finally to its famous brand, thus underlying the multiple facets associated with the concept.

Despite the high percentage of people agreeing with Soprintendenza, only 5.6% declared that they have actively participated in events and initiatives aiming at preserving the buildings (V_5). Independently of their agreement/disagreement with Soprintendenza, 80.1% of respondents advocated for a regeneration project for the area, with only 12.0% not affirming this need and 7.9% not answering (V_6). However, only a minority (37.5%) declared that they were aware of projects designed for the

complex (V_7), with residence being correlated to knowledge of the projects (χ^2 (1) = 19.606; $p < 0.001$): understandably, residents are proportionally more aware of projects than non-residents.

(b) Participants' evaluation of projects and relations among variables

A specific question aimed at identifying participants' opinions about the validity of the U.O.P. proposals (V_8). Interestingly, only 42.6% of respondents expressed an evaluation: this might highlight the difficulty for people to express a clear judgment on the basis of a picture combined with a short description, but maybe also the presence of uncertain opinions. Among the sub-set of people who responded, 57.6% attributed a low value to the projects, 33.7% a middle value and 8.7% a high value. Comments such as "*It's too aggressive*", "*It does not reflect the typical Ligurian architectural style*", "*It's too residential and it doesn't take into account the tourist component*", "*It's not useful for the community living in Finale*" explain why the majority of respondents attributed low values to the projects. In order to perform a chi-square test between the values expressed for the projects and the meanings attributed to Officine Piaggio, we aggregated and re-coded some categories of V_8 (e.g., 2 and 3 were merged) and then we performed the test. Results did not highlight any statistically significant correlation between the variables ($p = 0.217$), showing that residential and maybe environmentally invasive projects are not valued by people considering the buildings as historical–symbolic nor by those who consider them to be an abandoned complex. However, it is interesting to note that, among the respondents who both defined Officine Piaggio as "historical buildings" and expressed a judgment on the projects, 63.0% attributed a low score to the project options, and this percentage is even higher (65.5%) for people who defined them as "symbolic." The chi-square test performed on contingency tables relating the values attributed to the projects and the residents/non-residents variable indicated that the two variables are independent too ($p = 0.763$), suggesting that there is not a correlation between the place of residence and approval of the projects.

Participants' WTP for the implementation of regeneration projects coherent with their preferences (V_9) was investigated asking participants to choose among the following options: (1) 2–5 euros; (2) 5–10 euros; (3) 10–20 euros; (4) 20–50 euros; (5) 50–100 euros; (6) more than 100 euros. Results highlighted that middle values (i.e., 10–20 euros and 20–50 euros) registered the highest frequencies. Interestingly, among non-residents the most frequent amount is 5–10 euros (30%), whereas among residents it is 20–50 euros, with 27.7% choosing this option (Figure 2). Of the people who actively participated to events and initiatives finalized to the preservation of the complex (V_5), 50% selected the option "more than 100 euros," suggesting that there might be a tendency between commitment to the cause and WTP. However, the low number of frequencies in single cells did not allow us to conduct a reliable chi-square test to verify this hypothesis.

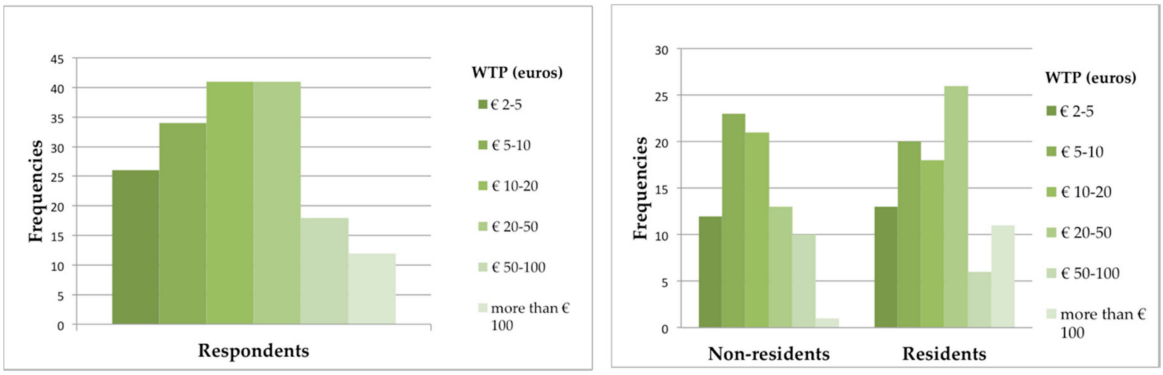


Figure 2. Willingness to pay for regeneration projects involving the Officine Piaggio area: frequencies (Source: authors' elaboration.)

(c) New uses favored by participants

Concerning the new functions to be associated to a regeneration project, the library was identified as a top priority by 33.1% of respondents (more specifically: 29.9% of the non-residents and 35.6% of the residents), whereas 25.7% particularly favored the building of a museum (i.e., 30.1% of the non-residents and 22.5% of the residents); 15.5% advocated for the creation of study rooms (i.e., 10.5% of the non-residents and 19.4% of the residents), 10.5% of an archive (i.e., 16.9% of the non-residents and 12.5% of the residents) and 9.4% of a conference hall (i.e., 5.3% of the non-residents and 5.8% of the residents). No clear priority was identified for different sports activities, since nearly one-third of respondents listed as a priority climbing, one-third water sports and one-third multiple sports (sports field). Recreational activities were ordered in this way, instead: associations (42%), clubs (23.6%), equipped beach (19.9%) and discotheque (9.8%). Finally, the ranking about production and commercial activities was the following: local craftsmanship (49.1%), start-ups (38.6%) and lastly a commercial center (5.1%). Table 4 summarizes the rankings.

Table 4. New functions to be attributed to a redevelopment project: rankings according to different stakeholders.

Activities	Functions	Non-Residents		Residents		All	
		Ranking	% Who Listed the Function as the First Priority	Ranking	% Who Listed the Function as the First Priority	Ranking	% Who Listed the Function as the First Priority
Cultural	Library	2	29.9	1	35.6	1	33.1
	Museum	1	30.1	2	22.5	2	25.7
	Study rooms	4	10.5	3	19.4	3	15.5
	Archive	3	16.9	4	12.5	4	10.5
	Conference hall	5	5.3	5	5.8	5	9.4
Recreational	Associations	1	35.7	1	46.5	1	42.0
	Clubs	3	20.0	2	26.2	2	23.6
	Equipped beach	2	27.4	3	14.3	3	19.9
	Discotheque	4	6.8	4	12.0	4	9.8
Sports	Water sports	2	32.9	1	37.3	1	34.1
	Open field	1	39.7	2	34.1	2	32.9
	Climbing	3	23.6	3	27.8	3	31.6
Productive	Local craftsmanship	1	47.1	1	50.5	1	49.1
	Start-ups	2	32.9	2	42.9	2	38.6
	Commercial center	3	10.7	3	1.0	3	5.1

5.2. Integration of Survey Results into SWOT Analysis and Proposal of a New Redevelopment Scenario Inspired to Sustainability Principles

As anticipated in Section 4, survey results were then integrated into the SWOT analysis to include elements such as memory, aesthetic, symbolical and historical values in the decision-making process. Based on the analysis of the competitive framework and of survey results, the SWOT highlighted that the points of strength of Finale Ligure are represented by the presence of communication arteries allowing an effective connection with the main cities of northern Italy and the coastal villages, by a relatively low degree of urbanization (if compared to towns in the nearby), by the existence of cultural associations and activities, and by the emergence of a kind of outdoor tourism which is complementary (if not alternative) to the seaside one. However, communication arteries also cause congestion, and other weaknesses can be identified in the following: lack of appropriate pedestrian and bike paths; a certain inclination towards the building of holiday houses along the coast; tourism and cultural offer mainly concentrated during the spring and summer seasons; lack of valorization of heritage inherited from modern times. The survey results highlight that a possible threat lies in the underestimation of the effects that might be caused by the building of new housing compounds and that might negatively affect not only the quality of the local landscape but also the vehicular carrying capacity and thus quality of life. Another threat is the progressive erosion of the local historical, social and symbolical capital, which could be further facilitated by the demolition of the industrial

heritage buildings. On the contrary, possible opportunities could be represented by the adoption of a sustainability framework encouraging the development of pedestrian and bike paths, of a year-round tourist and cultural offer, and by the enhancement of the abandoned areas.

Coherently with the guidelines presented in the introductory paragraphs and with the results stemming from the SWOT analysis, a member of the team elaborated the following new project, with the goal of identifying a hypothetical scenario considering sociocultural sustainability issues (Figure 3).

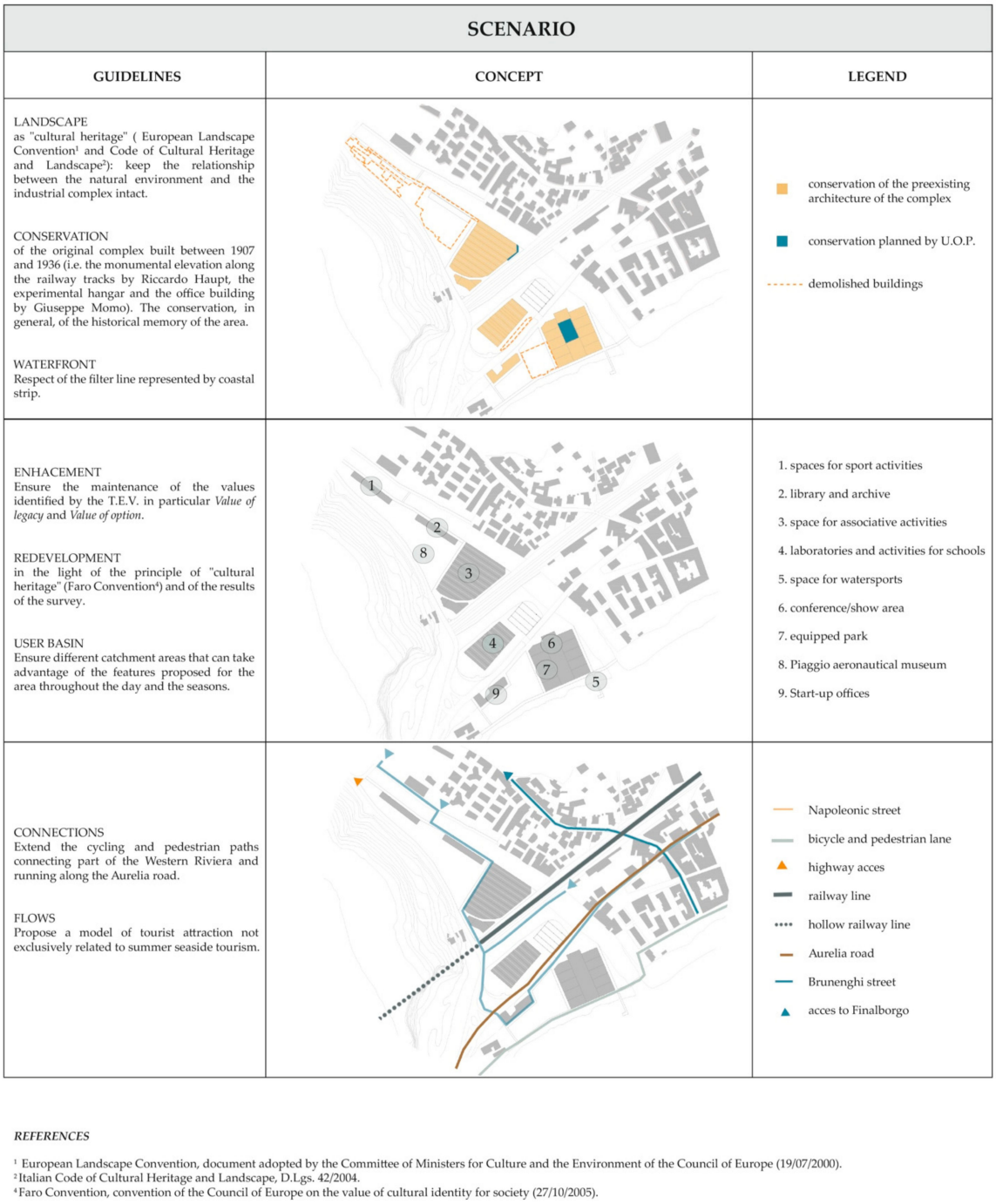


Figure 3. Guidelines for a scenario hypothesis. (Source: authors' elaboration.)

As detailed in Figure 3, the hypothesized scenario proposes—compared to the U.O.P. prescriptions—to preserve a greater extension of the buildings; this is not only coherent with the opinion expressed by Soprintendenza, but it also allows to safeguard the intrinsic values attributed to

the place by citizens and emerged through the survey [75]. Additionally, this choice was also made in light of the architectural value of some buildings: in fact, even though this might not be perceived by a large percentage of the citizenship, experts agree about their exceptionality, and these considerations undoubtedly need to be included during the design phase, so as to integrate different perspectives and facilitate multidimensional sustainability.

Concerning the new uses to be assigned to the spaces—which will need to be restored and adapted—we suggest implementing a mix of functions. These functions are not only compatible with the priorities identified by residents and non-residents, but also aim to enhance the experiences of two key stakeholders (i.e., people having permanent/temporary interests in the area), thus helping the municipality to achieve local development and livability goals [76].

Figure 3 also summarizes the sensitive themes emerged from the SWOT analysis presented above and in Section 3, and it provides thematic guidelines accordingly. The final sensitive topics (which take into account the scale of the building, of the site and of the landscape at large) are the result of an elementary "quali-quantitive" weighting operation of the topics based on the degree of relevance (positive, negative, neutral) and are linked to elements of the scenario, namely: landscape, conservation, waterfront, enhancement, redevelopment, user basin, connections and flows.

Overall, it is recommended to keep intact the historical relationship between the natural environment and the ex-industrial complex, to respect the coastal strip and the memory of the historical areas—to facilitate both environmental and cultural sustainability—and generally to make further choices maintaining non-use values such as the value of legacy and the option value. Differentiation of target and capitalization on sustainable infrastructures are recommended too. These guidelines will then inevitably have consequences in practical terms, e.g., influencing project management and the identification of partnerships. For instance, by a management perspective, the mix of functions advanced in our project hypothesis could imply a public–private management scheme, to be thoroughly examined with additional in-depth analyses also focusing on economic sustainability.

6. Conclusions

In this paper, a methodology aimed at supporting decision-making in sustainable redevelopment of waterfront contexts was proposed. Through the presentation of an empirical case study—the ex-industrial complex of Officine Piaggio (Finale Ligure, Italy)—we focused on a multidimensional issue that needs to take into account economic, social, environmental and cultural perspectives. If the economic dimension has been frequently prioritized in predominant neo-liberal approaches favoring, for instance, the building of expensive real estate units and commercial areas, the inclusion of stakeholders' points of view—such as the ones of citizens—in decision-making processes is still a debated issue and more literature on the topic is needed. In order to try to fill this gap, with this piece of work we have experimented the adoption of exploratory methods to firstly map residents and non-residents' perspectives about proposed scenarios and then to investigate their preferences, values and needs. More specifically, our approach was inspired by the complex social value theory, and the inclusion in the decision-making process of citizens' values and opinions—collected via an ad hoc survey—was performed accordingly.

Our results have shown that the historical and symbolical dimensions of the buildings under study are deeply embedded into participants' perceptions, and that projects with a strong residential character are not particularly appreciated, since they are frequently seen as too invasive and not respecting the values of the local landscape and area. Given the discrepancies between the values expressed by survey participants and the ones incorporated in the U.O.P. project solutions, it seems reasonable to affirm that the integration of participatory and exploratory methods aiming at collecting public opinions and values may represent an important step for the sustainable redevelopment of waterfront contexts: in fact, these methods not only contribute to capture TEV and especially CSV, but could also contribute to either orient public policies or at least help decision-makers make informed decisions and justify their choices in the public arena.

Participants' opinions and favored uses were then integrated into more established evaluation techniques (i.e., SWOT analyses) and combined with the guidelines recommended both by the literature and the results emerging from the analysis of the competitive framework to propose a redevelopment scenario compatible with sustainability principles. However, our project hypothesis was not empirically evaluated by citizens, and this represents a limit of the study. As a consequence, future steps of research could be represented by the conduction of an ad hoc survey aiming at verifying to what extent the proposed scenario would be validated by different stakeholders; at that stage, further suggestions and amendments could be integrated too. Additionally, it must be stated that, if this time the collection of residents' and tourists' opinions is occurred under the form of a research project, ideally citizens' points of view should be integrated more systematically by the public administration to inform the decision-making process and take into greater account the social value of redevelopment projects.

Then, it is important to underline that exploratory methods cannot be used as the only approach to be adopted to value project solutions: in fact, they need to be contextualized in a broader evaluation process, entailing for instance the integration of survey results into more established evaluation techniques. If, on the one hand, the redevelopment scenario proposed in this article has already tried to include participants' points of view, on the other hand a more structured methodology and workflow could be proposed for future studies, so as to overcome the current limits of our research. For instance, survey results could be either integrated with the opinions of experts in different fields—as it is usually done in multi-criteria analysis approaches—or combined with the results stemming from the implementation of a Delphi method. Research developments could entail the application of tools that refer to multi-criteria techniques and operational research, but also to innovative instruments such as Debat Public [77,78], recently regulated at national level. Finally, it must be stated that it could be useful to integrate not only the perspectives of stakeholders such as citizens and other potential users, of policy-makers, urban planners and various economic actors, but also the ones of experts in the conservation and restoration fields, so as to best preserve both the architectural remains and the memory they help perpetuate.

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References

1. Shah, S.; Roy, A.K. Social Sustainability of Urban Waterfront—The Case of Carter Road Waterfront in Mumbai, India. *Procedia Environ. Sci.* **2017**, *37*, 195–204. [CrossRef]
2. Chemrouk, O.; Chabbi, N. Vulnerability of Algiers Waterfront and the New Urban Development Scheme. *Procedia Eng.* **2016**, *161*, 1417–1422. [CrossRef]
3. Hee, L.; Low, B.L. Water margin—The redevelopment of waterfronts and waterways in Asian Cities. In Proceedings of the 4th International Conference of the International Forum on Urbanism, Amsterdam, The Netherlands, 26–28 November 2009; pp. 809–817.
4. Bunce, S.; Desfor, G. Introduction to "Political ecologies of urban waterfront transformations". *Cities* **2007**, *24*, 251–258. [CrossRef]
5. Sairinen, R.; Kumpulainen, S. Assessing social impacts in urban waterfront regeneration. *Environ. Impact Assess. Rev.* **2006**, *26*, 120–135. [CrossRef]
6. Clemente, M. Identità marittima e rigenerazione urbana per lo sviluppo sostenibile delle città di mare. *BDC Bollettino Del Centro Calza Bini* **2013**, *13*, 181–194.
7. Del Giudice, V.; De Paola, P. Real Estate Economics, Management and Investments: New Perspectives and Frontiers. *Buildings* **2018**, *8*, 40. [CrossRef]

8. Fusco Girard, L.; Nijkamp, P. *Le Valutazioni per lo Sviluppo Sostenibile Della Città e del Territorio*; Franco Angeli: Milano, Italy, 1997.
9. Fusco Girard, L. *Risorse Architettoniche e Culturali*; Franco Angeli: Milano, Italy, 1987.
10. Navrud, S.; Ready, R.C. *Valuing Cultural Heritage: Applying Environmental Valuation Techniques to Historic Buildings, Monuments, and Artifacts*; Edwar Elgar Publishing: Cheltenham, UK, 2002.
11. Fusco Girard, L.; De Toro, P. Integrated spatial assessment: A multicriteria approach to sustainable development of cultural and environmental heritage in San Marco dei Cavoti, Italy. *Cent. Eur. J. Oper. Res.* **2007**, *15*, 281–299. [CrossRef]
12. Barreca, A.; Curto, R.; Rolando, D. An innovative methodological and operational approach to developing Management Plans for UNESCO World Heritage Sites: A Geographic Information System for "Ivrea, industrial city of the 20th century". *Aestimum* **2017**, *71*, 177–213. [CrossRef]
13. Coscia, C.; Curto, R.; Gadaleta, V.; Peña Díaz, J.; Rolando, D. Enjoyment of the Cuban Modern Heritage: An innovative cultural visitors route to connect the UNESCO site of Old Havana to the National Schools of Art. In Proceedings of the XVI International Forum "World Heritage and Knowledge", Capri, Italy, 14–16 June 2018; pp. 535–544.
14. Brigato, M.V.; Coscia, C.; Curto, R.; Fregonara, E. Valutazioni per strategie di sviluppo turistico sostenibile. Il caso del Bacino Metallifero dell'Iglesiente (ITA). *Territorio* **2014**, *69*, 123–133. [CrossRef]
15. Gražulevičiūtė, I. Cultural Heritage in the Context of Sustainable Development. *Environ. Res. Eng. Manag.* **2006**, *3*, 74–79.
16. Cerreta, M.; Inglese, P.; Malangone, V.; Panaro, S. Complex values-based approach for multidimensional evaluation of landscape. In Proceedings of the International Conference on Computational Science and Its Applications, Guimarães, Portugal, 30 June–3 July 2014; Springer: Cham, Switzerland, 2014; pp. 382–397.
17. Fregonara, E.; Giordano, R.; Ferrando, D.G.; Pattono, S. Economic-environmental indicators to support investment decisions: A focus on the buildings' end-of-life stage. *Buildings* **2017**, *7*, 65. [CrossRef]
18. Barthelmes, V.M.; Becchio, C.; Bottero, M.C.; Corgnati, S.P. Cost-optimal analysis for the definition of energy design strategies: The case of a nearly-Zero Energy Building. *Valori e Valutazioni* **2016**, *16*, 61–76.
19. Fregonara, E.; Giordano, R.; Rolando, D.; Tulliani, J.M. Integrating Environmental and Economic Sustainability in New Building Construction and Retrofits. *J. Urban Technol.* **2016**, *26*, 3–28. [CrossRef]
20. Curto, R.; Fregonara, E. Decision tools for investments in the real estate sector with risk and uncertainty elements. *Jahrb. Fuer Regionalwissenschaft* **1999**, *19*, 55–85.
21. Davidson, M. Waterfront Development. In *International Encyclopedia of Human Geography*; Thrift, N., Kitchen, R., Eds.; Elsevier: Oxford, UK, 2009; pp. 215–221.
22. Ferretti, V.; Bottero, M.; Mondini, G. An Integrated Approach for Exploring Opportunities and Vulnerabilities of Complex Territorial Systems. In Proceedings of the Computational Science and Its Applications—ICCSA 2014, Guimarães, Portugal, 30 June–3 July 2014; Murgante, B., Misra, S., Rocha, A.M.A.C., Torre, C., Rocha, J.G., Falcão, M.I., Gervasi, O., Eds.; Springer: Cham, Switzerland, 2014; Volume 8581, pp. 667–681.
23. Giovinazzi, O.; Moretti, M. Port Cities and Urban Waterfront: Transformations and opportunities. *TeMaLab J. Mobil. Land Use Environ.* **2010**, *3*, 57–64.
24. Oakley, S. Re-imagining City Waterfronts: A Comparative Analysis of Governing Renewal in Adelaide, Darwin and Melbourne. *Urban Policy Res.* **2011**, *29*, 221–238. [CrossRef]
25. Boland, P.; Bronte, J.; Muir, J. On the waterfront: Neoliberal urbanism and the politics of public benefit. *Cities* **2017**, *61*, 117–127. [CrossRef]
26. Girard, L.F. Sustainability, creativity, resilience: Toward new development strategies of port areas through evaluation processes. *Int. J. Sustain. Dev.* **2010**, *13*, 161–184. [CrossRef]
27. Oakley, S. Public Consultation and Place-Marketing in the Revitalisation of the Port Adelaide Waterfront. *Urban Policy Res.* **2007**, *25*, 113–128. [CrossRef]
28. Gunay, Z.; Dokmeci, V. Culture-led regeneration of Istanbul waterfront: Golden Horn Cultural Valley Project. *Cities* **2012**, *29*, 213–222. [CrossRef]
29. Angrisano, M. "Economic heritage impact assessment" come strumento per valutare gli impatti dei grandi progetti di riqualificazione delle città costiere siti Unesco. Il caso studio di Torre Annunziata nel golfo di Napoli. *Territorio Italia* **2016**, 75–98. [CrossRef]
30. Pavia, R.; Di Venosa, M. *Waterfront: From Conflict to Integration*; LISt: Trento, Italy, 2012.

31. Mostafa, L.A. Urban and Social Impacts of Waterfronts Development, Case Study: Jeddah Corniche. *Procedia Environ. Sci.* **2017**, *37*, 205–221. [CrossRef]
32. Coscia, C.; Russo, V. The Valorization of Economic Assets and Social Capacities of the Historic Farmhouse System in Peri-Urban Allocation: A Sample of Application of the Corporate Social Responsible (CSR) Approach. In *Smart and Sustainable Planning for Cities and Regions*; Bisello, A., Vettorato, D., Laconte, P., Costa, S., Eds.; Springer: Cham, Switzerland, 2018; pp. 615–634.
33. Romeo, E.; Morezzi, E.; Rudiero, R. Industrial heritage: Reflections on the use compatibility of cultural sustainability and energy efficiency. *Energy Procedia* **2015**, *78*, 1305–1310. [CrossRef]
34. Coscia, C.; Curto, R. Valorising in the Absence of Public Resources and Weak Markets: The Case of "Ivrea, the 20th Century Industrial City". In *Appraisal: From Theory to Practice*; Stanghellini, S., Morano, P., Bottero, M., Oppio, A., Eds.; Springer: Cham, Switzerland, 2017; pp. 79–99. Available online: http://link.springer.com/10.1007/978-3-319-49676-4_7 (accessed on 15 June 2018).
35. Del Giudice, V.; De Paola, P.; Forte, F. Valuation of Historical, Cultural and Environmental Resources, Between Traditional Approaches and Future Perspectives. In *Integrated Evaluation for the Management of Contemporary Cities*; Mondini, G., Fattinnanzi, E., Oppio, A., Bottero, M., Stanghellini, S., Eds.; Springer: Cham, Switzerland, 2018; pp. 177–186.
36. Airas, A.; Hall, P.V.; Stern, P. Asserting historical "distinctiveness" in industrial waterfront transformation. *Cities* **2015**, *44*, 86–93. [CrossRef]
37. Cerreta, M.; Mele, R. A Landscape Complex Values Map: Integration among Soft Values and Hard Values in a Spatial Decision Support System. In *Lecture Notes in Computer Science, Proceedings of the Computational Science and Its Applications—ICCSA 2012, Salvador de Bahia, Brazil, 18–21 June 2012*; Murgante, B., Gervasi, O., Misra, S., Nedjah, N., Rocha, A.M.A.C., Eds.; Springer: Berlin/Heidelberg, Germany, 2012; Volume 7334, pp. 653–669.
38. Stevens, T.H.; Echeverria, J.; Glass, R.J.; Hager, T.; More, T.A. Measuring the existence value of wildlife: What do CVM estimates really show? *Land Econ.* **1991**, *67*, 390–400. [CrossRef]
39. Lee, C.K.; Han, S.Y. Estimating the use and preservation values of national parks' tourism resources using a contingent valuation method. *Tour. Manag.* **2002**, *23*, 531–540. [CrossRef]
40. Ruijgrok, E.C.M. The three economic values of cultural heritage: A case study in The Netherlands. *J. Cult. Herit.* **2006**, *7*, 206–213. [CrossRef]
41. Chan, K.M.; Goldstein, J.; Satterfield, T.; Hannahs, N.; Kikiloi, K.; Naidoo, R.; Woodside, U. Cultural services and non-use values. In *Natural Capital: Theory & Practice of Mapping Ecosystem Services*; Oxford University Press: Oxford, UK, 2011; pp. 206–228.
42. De Groot, R.; Brander, L.; Van Der Ploeg, S.; Costanza, R.; Bernard, F.; Braat, L.; Hussain, S. Global estimates of the value of ecosystems and their services in monetary units. *Ecosyst. Serv.* **2012**, *1*, 50–61. [CrossRef]
43. Hermann, A.; Schleifer, S.; Wrbka, T. The concept of ecosystem services regarding landscape research: A review. *Living Rev. Landsc. Res.* **2011**, *5*, 1–37. [CrossRef]
44. Fagerholm, N.; Käyhkö, N.; Ndumbaro, F.; Khamis, M. Community stakeholders' knowledge in landscape assessment—Mapping indicators for landscape services. *Ecol. Indic.* **2012**, *18*, 421–433. [CrossRef]
45. Milcu, A.I.; Hanspach, J.; Abson, D.; Fischer, J. Cultural ecosystem services: A literature review and prospects for future research. *Ecol. Soc.* **2013**, *18*, 1–34. [CrossRef]
46. Angrisano, M.; Biancamano, P.F.; Bosone, M.; Carone, P.; Daldanise, G.; De Rosa, F.; Franciosa, A.; Gravagnuolo, A.; Iodice, S.; Nocca, F.; et al. Towards operationalizing UNESCO Recommendations on 'Historic Urban Landscape': A position paper. *Aestimum* **2016**, *69*, 165–210. [CrossRef]
47. Mrak, I. A Methodological Framework Based on the Dynamic-Evolutionary View of Heritage. *Sustainability* **2013**, *5*, 3992–4023. [CrossRef]
48. Throsby, D. *Economics and Culture*; Cambridge University Press: Cambridge, UK, 2001.
49. Throsby, D. Heritage economics: A conceptual framework. In *The Economics of Uniqueness*; Licciardi, G., Amirtahmasebi, R., Eds.; The World Bank: Washington, DC, USA, 2012; pp. 45–72.
50. Bottero, M.C.; Ferretti, V.; Mondini, G. Valori ambientali, equità intergenerazionale e sostenibilità: Una riflessione a partire dall'Analisi Costi Benefici. *Valori e Valutazioni* **2012**, *9*, 91–106.

51. Bottero, M.; Ferretti, V.; Mondini, G. Constructing Multi-attribute Value Functions for Sustainability Assessment of Urban Projects. In Proceedings of the Computational Science and Its Applications—ICCSA 2014, Guimarães, Portugal, 30 June–3 July 2014; Murgante, B., Misra, S., Rocha, A.M.A.C., Torre, C., Rocha, J.G., Falcão, M.I., Gervasi, O., Eds.; Springer: Cham, Switzerland, 2014; Volume 8581, pp. 51–64.
52. Forte, F.; Girard, L.F. Creativity and new architectural assets: The complex value of beauty. *Int. J. Sustain. Dev.* **2009**, *12*, 160–191. [CrossRef]
53. Vayona, A. Investigating the preferences of individuals in redeveloping waterfronts: The case of the port of Thessaloniki—Greece. *Cities* **2011**, *28*, 424–432. [CrossRef]
54. Gravagnuolo, A. Valutazione e mappatura dei servizi culturali nei paesaggi terrazzati. Il caso studio della Costiera Amalfitana. *Territorio Italia* **2016**, 107–132. [CrossRef]
55. López-Martínez, F. Visual landscape preferences in Mediterranean areas and their socio-demographic influences. *Ecol. Eng.* **2017**, *104*, 205–215. [CrossRef]
56. Deghati Najd, M.; Ismail, N.A.; Maulan, S.; Mohd Yunos, M.Y.; Dabbagh Niya, M. Visual preference dimensions of historic urban areas: The determinants for urban heritage conservation. *Habitat Int.* **2015**, *49*, 115–125. [CrossRef]
57. Kalivoda, O.; Vojar, J.; Skřivanová, Z.; Zahradník, D. Consensus in landscape preference judgments: The effects of landscape visual aesthetic quality and respondents' characteristics. *J. Environ. Manag.* **2014**, *137*, 36–44. [CrossRef] [PubMed]
58. Fusco Girard, L. Toward a Smart Sustainable Development of Port Cities/Areas: The Role of the 'Historic Urban Landscape' Approach. *Sustainability* **2013**, *5*, 4329–4348. [CrossRef]
59. Yung, E.H.K.; Chan, E.H.W. Evaluation of the social values and willingness to pay for conserving built heritage in Hong Kong. *Facilities* **2015**, *33*, 76–98. [CrossRef]
60. Choi, H.Y.; Kwak, S.J.; Yoo, S.H. The preservation value of the Bangudae Petroglyphs, the 285th Korean National Treasure. *J. Cult. Herit.* **2016**, *18*, 380–383. [CrossRef]
61. Del Saz Salazar, S.; Marques, J.M. Valuing cultural heritage: The social benefits of restoring an old Arab tower. *J. Cult. Herit.* **2005**, *6*, 69–77. [CrossRef]
62. Marinò, P. Il crowdfunding finalizzato al finanziamento di progetti di valorizzazione di complessi di elevato valore storico architettonico: Il caso di Torino Esposizioni. *Territorio Italia* **2015**, 99–123. [CrossRef]
63. Kuhfuss, L.; Hanley, N.; Whyte, R. Should historic sites protection be targeted at the most famous? *Evidence from a contingent valuation in Scotland. J. Cult. Herit.* **2016**, *20*, 682–685. [CrossRef]
64. Gražulevičiūtė-Vileniškė, I.; Janilionis, V.; Guščinskienė, J.; Azukaitė, L. Contingent valuation of built heritage properties in a transition country: A case of Lithuania. *Int. J. Strateg. Prop. Manag.* **2011**, *15*, 393–415. [CrossRef]
65. Brancucci, G.; Paliaga, G. La geodiversità della Liguria come risorsa per il riequilibrio costa-entroterra. In *Paesaggio Costiero, Sviluppo Turistico Sostenibile*; Calcagno Maniglio, A., Ed.; Gangemi Editore: Roma, Italy; pp. 125–126.
66. Tortarolo, A. La Piaggio a Finale: 1906–1917. *Quaderno dell'Associazione Emanuele Celesia* **2011**, 1.
67. De Maestri, S.; Tolaini, R. *Storie e Itinerari Dell'Industria Ligure*; Edizioni De Ferrari: Genova, Italy, 2011.
68. Montanari, G. *Giuseppe Momo Ingegnere Architetto: La Ricerca di Una Nuova Tradizione Tra Torino e Roma*; CELID: Torino, Italy, 2000; pp. 68–69.
69. Newcombe, R. From client to project stakeholders: A stakeholder mapping approach. *Constr. Manag. Econ.* **2003**, *21*, 841–848. [CrossRef]
70. Ackermann, F.; Eden, C. Strategic management of stakeholders: Theory and practice. *Long Range Plan.* **2011**, *44*, 179–196. [CrossRef]
71. Norese, M.F.; Rolando, D.; Fregonara, E. Integration of problem structuring methods: A methodological proposal for complex regional decision-making processes. *Int. J. Decis. Support Syst. Technol.* **2015**, *7*, 58–83. [CrossRef]
72. Rolando, D. Multicriteria decision problem structuring: The strategic choice approach in the context of public projects in Italy. *Int. J. Multicriteria Decis. Mak.* **2015**, *5*, 4–38. [CrossRef]
73. De Filippi, F.; Coscia, C.; Cocina, G.G. Piattaforme collaborative per progetti di innovazione sociale. Il caso Miramap a Torino. *Techne* **2017**, *14*, 218–225.
74. Lichfield, N. *Community Impact Evaluation*; UCL Press: London, UK, 1996.

75. Giove, S.; Rosato, P. La valutazione dell'attitudine delle dimore storiche al riuso economico "sostenibile": Un approccio multiattributo non additivo. *Valori e valutazioni* **2010**, *4–5*, 71–82.
76. Levi Sacerdotti, S.; Gasca, E.; Mauro, S. Il visitor management come strumento di monitoraggio e valutazione del territorio verso il disegno delle politiche del turismo. *Valori e Valutazioni* **2010**, *4–5*, 83–100.
77. Ollivier-Tragalo, M.; Piechaczyck, X. *Evaluer, Debattre ou Negocier L'utilite Publique? Le Debat Public en Amont des Grands Projets D'amenagement: Un Theme Pour Une Communaute D'idees*; INRETS, Les Collections de l'INRETS: Paris, France, 2001; p. 233.
78. Revel, M.; Blatrix, C.; Blondiaux, L.; Fourniau, J.M.; Hériard Dubreuil, B.; Lefebvre, R. *Le Débat Public: Une Expérience Française de Démocratie Participative*; La Découverte: Paris, France, 2007.